

Amendments to the Drawings:

The drawing sheet attached in connection with the above-identified application containing Figure 2 is being presented as a new formal drawing sheet to be substituted for the previously submitted drawing sheet. The drawing Figure 2 has been amended. Appended to this amendment is an annotated copy of the previous drawing sheet which has been marked to show change presented in the replacement sheet of the drawing.

REMARKS

Applicant acknowledges receipt of an Office Action dated January 25, 2005. In this response Applicant has amended claims 1, 2 and 13. In addition, Applicants have added claims 17-20. Support for these amendments may be found, *inter alia*, in Figure 2 and Figure 3 and in the specification, *inter alia*, in the paragraph bridging pages 6 and 7, the first full paragraph on page 7 and in the paragraph bridging pages 9 and 10. In addition, Applicant has redrafted claims 3, 4 and 10 in independent form. Following entry of these amendments, claims 1-20 are pending in the application. Claims 13-16 have been withdrawn from consideration as being drawn to non-elected inventions.

Reconsideration of the present application is respectfully requested in view of the foregoing amendments and the remarks which follow.

Drawings

With this response, Applicant has submitted a replacement formal drawing sheet for Figure 2 to delete the transposed "LS21" which was inadvertently included to the left of the designation "FIG. 2".

Declaration

Applicant submits herewith a signed declaration indicating the correct filing date for Japanese Patent Application P2000-041194.

Rejections Under 35 U.S.C. § 112

On page 3 of the Office Action, the PTO has rejected claims 1-12 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

With respect to the reference to "thermal medium" in claim 1, Applicant has amended claim 1 to recite "to supply as a thermal medium a fluid containing one of a combustion product of the first catalyst combustion and a combustion product of the second catalyst combustion to the system."

With respect to the fluid communication chamber, Applicant has amended claim 1 to recite “a fluid communication portion between the first catalyst combustion portion and the second catalyst combustion portion.”

Finally, Applicant has redrafted the last 4 lines of claim 1 to describe preferred relationships between the fluid resistances in the first combustion portion and the second combustion portion. Claim 2 has been amended for consistency with the language of claim 1.

In view of the foregoing amendments, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection under §112.

Rejections Under 35 U.S.C. § 102

On page 4 of the Office Action, the PTO has rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent 63-197814 to Yamada (hereafter “Yamada”). In addition, on page 5 of the Office Action, the PTO has rejected claims 1, 2, 9, 11 and 12 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,361,586 to McWhirter et al. (hereinafter “McWhirter”). As set forth below, Applicants respectfully traverse these rejections.

Claim 1 recites a “catalyst combustor comprising a first catalyst combustion portion. . . a second catalyst combustion portion. . . and a fluid communication portion between the first catalyst combustion portion and the second catalyst combustion portion.” Claim 1 continues, reciting:

. . . wherein the first catalyst combustion portion and the second catalyst combustion portion have predetermined fluid resistances, wherein the first catalyst combustion takes place only in the first catalyst combustion portion, as the fluid containing the first fuel and the fluid containing the first oxidizer are supplied to the first catalyst combustion portion, and the second catalyst combustion takes place in both the first and second catalyst combustion portions, as the fluid containing the second fuel and the fluid containing the second oxidizer are supplied to the catalyst.

In contrast to Yamada and McWhirter, the catalyst combustor can thus perform an actuator-less control of the fluids. In further contrast to Yamada and McWhirter, the catalyst

combustion in the restricted region (the first catalyst combustion portion) provides a quick warming in a start up operation (see page 12 line 35 to page 13 line 15 of the specification).

Further, with respect to McWhirter, Applicant notes that in McWhirter's combustor 6, fuel 5 flows into one of the annular passages, for example 23, when the fuel 5 is supplied via a fuel manifold 70, however, the fuel 5 supplied via the other fuel manifold, for example 72, cannot flow into both the annular passages 23 and 25, since the manifold 72 is located downstream in air streams 4' of the enhance of the annular passage 23 (Fig 4 and col. 4 line 45 to col. 6 line 3).

For these reasons, Applicant submits that claim 1 is not anticipated by either Yamada or McWhirter. Since claims 2, 9, 11 and 12 depend from claim 1, Applicant submits that McWhirter cannot anticipate these claims for the same reasons McWhirter cannot anticipate claim 1.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections under §102.

Allowable Subject Matter

Applicant acknowledges, with appreciation, the PTO's indication that claims 3-8 and 10 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In this response, Applicant has redrafted claims 3, 4 and 10 in independent form. In view of these amendments, Applicant submits that claims 3-8 and 10 are in *prima facie* allowable form.

Newly Added Claims

In this response, Applicant has added claims 17-20. Applicant submits that claim 17 is allowable for at least the same reasons as claim 1. Applicant submits that neither Yamada nor McWhirter disclose the claimed fluid communication portions set forth in claims 18-20.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that all of the pending claims are now in condition for allowance. An early notice to this effect is

earnestly solicited. If there are any questions regarding the application, the Examiner is invited to contact the undersigned at the number below.

Respectfully submitted,

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The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

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FIG. 2

